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The Whitaker Corporation  
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EXAMINER
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DINH, PHUONG K

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2839

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/706,748  
Filing Date: November 12, 2003  
Appellant(s): FLICKINGER ET AL.

**MAILED**

**MAR 9 2007**

**GROUP 2800**

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**Stephen Driscoll**  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 11/02/2006 appealing from the Office action mailed 02/22/2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

This appeal involves claims 26-31, 34-37, 39-40, 42, 43. However note that appellant only asks review of the rejection of claims 26 and 34 and therefore the rejections of other claims are not at issue in this case. Claims 1-25 are allowed and claims 32 and 33 are objected.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appealed.**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,879,173	Poplawski et al.	3-1999
4,801,924	Burgmann	1-1989
4,352,492	Smith	10-1982
4,388,671	Hall	6-1983

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 26-31, 34-37, 39-40, 42, 43 are rejected under 35 U. S. C. 103(a). This rejection is set forth in prior office action mailed on 02/22/2006 and is appealed below.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 26, 38-40 and 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poplawski (5879173) in view of Smith and further in view of Burgmann.

Regarding claims 26, 38-40, 42-43, Poplawski, see figures 10, 17, discloses a telecommunication transceiver module for electrically connecting to a mating connector 380, 780 mounted to a host circuit board 728 the module 312 comprising: a housing 312 having a front and back orientation and a top and bottom orientation, said housing 312 having a top wall, a bottom wall, and side walls, each of said top wall, said bottom wall,

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and said side walls being planar; a planar module circuit board 460 having pads suitable for forming an electrical connection with contacts of the mating connector, said pads being enclosed by the planes defined by said top wall, said bottom wall, said side walls, a connector interface 320 at the front of said housing 312, said connector interface being adapted for receiving a connector of an electrical or optical telecommunication conductor. Poplawski discloses the claimed invention except for a back wall that provides enclosure for the pcb pads. Smith, figure 9 discloses a back wall and Burgmann, figure 4 uses housing with back walls enclosing pcb pads. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Poplawski to provide the back wall as taught by Smith and Burgmann so as to provide for a simpler housing design and for protection of pads of the circuit board edge.

Regarding claim 27, Poplawski discloses said pads are disposed on an edge of said module circuit board 460.

Regarding claim 28, Poplawski said pads are adapted to mate with said mating connector through movement of the module to said mating connector along a plane parallel to the plane of said circuit board.

Regarding claim 29, Poplawski discloses said back wall only partially covers the back of said module circuit board such that said edge portion is accessible from the back of the module along the plane of said module circuit board.

Regarding claims 30, 34-37, Poplawski discloses grounding contacts 360 configured for electrical connection to said housing of said receptacle upon insertion of said module in said receptacle.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Poplawski in view of Smith and Burgmann and further in view of Hall.

Regarding claim 31, Poplawski, Smith and Burgmann disclose the grounding contacts are disposed at least on the side walls. But do not disclose the grounding contacts are disposed on the top wall. Hall discloses the grounding contacts configured for electrical connection to the housing of the receptacle upon insertion of the module in the receptacle. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Poplawski, Smith and Burgmann to provide the grounding contacts configured for electrical connection to the housing of the receptacle upon insertion of the module in the receptacle as taught by Hall so as to supply signal to the system.

**(10) Response to Argument**

Initially note that all arguments are directed to claims 26 and 34 and therefore only claims 26 and 34 are at issue.

Appellant argues that the rejection is based on a combination of non-analogous prior art.

The Examiner respectfully disagrees. Poplawski Smith and Burgmann are analogous since all three references involve electronic cartridges to be inserted into receivers and with pcb edges in the cartridges exposed and used as electrical connectors.

Appellant respectfully submit the previous that Smith and Burgmann are not valid references to support a rejection under 103(a). They are not analogous prior art. In this case Smith and Burgmann are neither in Appellant field not are they reasonably pertinent to the problem with which the invention was concreted.

The Examiner respectfully disagrees. Poplawski, Smith and Burgmann are analogous since all three references involve electronic cartridges to be inserted into receivers and with pcb edges in the cartridges exposed and used as electrical connectors. The patents need not be in the same field of endeavor since the teachings at issue relate to cartridge structure, not to matters of related to the specific use of the device.

Appellant argues that the field of applicants endeavor is set forth in the claims themselves, which are directed to a telecommunication transceiver module. On the other hand, Smith is directed to a video game apparatus for connection to a standard

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television, therefore since Smith is related to video games and not a transceiver module for telecommunication, it is outside the field of the appellant's endeavor. Burgmann is related to a wireless security system as set forth in the field of invention (column 1, lines 7-8). Indeed, the transceiver module disclosed in Burgmann is wireless and does not even interface with optical or electrical plug connector. Therefore since Burgmann relates to a wireless security system and not to a transceiver module for telecommunication, it also lies outside the field of the applicant's endeavor.

The Examiner respectfully disagrees. The primary Poplawski discloses a robust optoelectronic transceiver module and it is the same field of applicant's invention. However, Poplawski discloses the claimed invention except for a back wall as discussed above. The Examiner just uses the secondary references Smith and Burgmann to provide a back wall so as to provide for a housing design, with a back wall that provides added protection and shielding of the pcb edge. The patents need not be in the same field of endeavor since the teachings at issue relate to cartridge structure, not to matters of related to the specific use of the device.

Appellant argues that Smith and Burgmann lay outside the field of Appellants' endeavor, the issue becomes whether the references are reasonably pertinent to the particular problem with which the inventor was concerned. Here, the claimed invention is aimed at a telecommunication transceiver module, which facilitates miniaturization and EMI protection. More specifically, the claimed invention is directed to a transceiver module that "facilitates miniaturization and high operating frequencies [characteristic of telecommunications] by effectively shielding EMI emissions to eliminate leaks...." (App.



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Summary of Invention). To this end, the transceiver module of the claimed invention comprises walls to shield the circuit board it contains and prevent EMI emissions. The transceiver module also comprises, in a preferred embodiment, grounding tabs to channel EMI to ground.

This argument is not persuasive, since Poplawski formed includes such EMI shielding walls.

Appellant argues that it is inconceivable to Appellants why one skilled in the art would look to Smith or Burgmann to solve a problem of configuring a transceiver module, which is suitable for miniaturization and EMI reduction in the telecommunications field. That is, as mentioned above, Smith is concerned about expanding the type of video games available or play by providing a preprogrammed cartridge having additional memory. See Smith col. 3, II 3-8, and II, 59-62. Burgmann is concerned about programming a transmitter, which does not transmit while it is transit between the programming unit and the particular sensor in which it is to be installed. Purportedly, by preventing its transmission during this time, it does not diminish its low power voltage source and lose vital memory. Therefore, Smith is directed to a module containing memory and Burgmann is directed to a transmitter programmed to restrict transmissions. Neither reference mentions a transceiver module for telecommunications--much less the need to miniaturize and control EMI. (To the contrary, Burgmann is directed to a transmitter and, thus, is aimed at generating electromagnetic radiation rather than reducing it.) There is not a scintilla of evidence suggesting that one skilled in the art would turn to either reference to solve the problem

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of designing a telecommunication transceiver for miniaturization and EMI reduction.

Therefore, since Smith and Burgmann are not in the field of the claimed invention, and since one skilled in the art would not find the references reasonably pertinent to solve the problem with which the invention was concerned, Smith and Burgmann are not analogous art.

The Examiner respectfully disagrees for reasons stated above.

Appellant argues that here is no motivation to combine the transceiver of Poplawski with the module housing as taught by Smith and Burgmann. The Examiner has stated that one would be motivated to modify the transceiver of Poplawski to have the back wall as taught by Smith and Burgmann so as to "provide for a simpler housing design." Such a rejection, however, is based on hindsight rather than motivation found within the prior art. Indeed, there is no motivation to modify the transceiver of Poplawski to have the housing as taught by Burgmann or Smith since such a modification would render the module of Poplawski unsuitable for its intended purpose. It is well established in US patent law that there can be no motivation to modify a reference if that modification would render the reference unsuitable for its intended purpose.

The Examiner respectfully disagrees. The primary Poplawski discloses a robust optoelectronic transceiver module and it is the same field of appellant's invention. However, Poplawski discloses the claimed invention except for a back wall as discussed above. The Examiner just uses the secondary references Smith and Burgmann to provide a back wall so as to provide for a simpler housing design, with a back wall that provides added protection and shielding of the pcb edge. The patents

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need not be in the same field of endeavor since the teachings at issue relate to cartridge structure, not to matters of related to the specific use of the device.

Appellant argues that Poplawski is directed to an optoelectric transceiver having a potted circuit board. The housing of the transceiver functions as a potting box for containing the potting material as it is poured over the circuit board. Therefore, the housing of Poplawski is intended, not only to house the circuit board, but also to contain the potting material poured over the circuit board. (See Poplawski abstract). Modifying the module of Poplawski to have a rear wall as disclosed in Burgmann or Smith for containing the module connector would destroy the potting box. Specifically, if the housing were modified so as to contain the module connector, the rear wall must contain an opening to provide access to the module connector. This opening, however, would compromise the potting box, as the potting material would be free to flow out. Additionally, if the circuit board and module connector were contained within the same housing, than the potting material would cover, not only the circuit board, but also the module connector as well. This would run the module connector. Thus, modifying the housing of Poplawski so that the back wall contains the module connector would destroy the intended purpose of Poplawski.

The Examiner respectfully disagrees for the reasons stated above.

For the above reasons, it is believed that the rejection should be sustained.

Respectfully submitted.



Phuong Dinh

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February 21, 2007

Conferees:

TC Patel



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